



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,136	11/29/2000	John T. Armstrong	46506/43	6547

7590 03/24/2005
Michael J. Berger
Amster, Rothstein & Ebenstein
90 Park Avenue
New York, NY 10016

EXAMINER

HOLLOWAY III, EDWIN C

ART UNIT	PAPER NUMBER
----------	--------------

2635

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,136

Applicant(s)

ARMSTRONG ET AL.

Examiner

Edwin C. Holloway, III

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 11-29-00 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12-7-01, 11-13-02</u> . | 6) <input type="checkbox"/> Other: _____ |

EXAMINER'S RESPONSE

1. In response to the application filed 11-29-00, the application has been examined. The examiner has considered the presentation of claims in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Claim Rejections - 35 USC § 102 & 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically

Art Unit: 2635

disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 11, 14-17, 28-29 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Toole (US 6130602A). Regarding claims 11, 14-17 and 38, O'Toole disclose an RFID interrogator with various transmission formats including FSK and various reception formats including BPSK. See paragraphs 492 and 634 of the detailed description. Regarding claims 28-29, O'Toole discloses an RFID transponder with the claimed random number generator in figs. 9AA-CB and paragraphs 584 and 607 of the detailed description.

6. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Freeze (US 6313737B1). Freeze discloses activating interrogators in groups in col. 12 lines 14-38.

7. Claims 1-10, 31-33 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Toole (US 6130602A) as

Art Unit: 2635

applied above in view of Cato (US 5539394A) and Snodgrass (US 5841770A). O'Toole discloses an RFID transponder with random number generator for arbitration but does not include the arbitration details of claims 1-10, 31-33 and 35-36. Cato discloses an analogous art interrogation system and method with an iterative process to avoid collisions by generating new hashing base number to vary the response time slot. See figs. 6-7 and cols. 7-9. Snodgrass discloses an analogous art interrogation protocol with an arbitration number randomly selected a transponder and response provided based on comparison of the arbitration number to a branch/mask number. See the abstract and col. 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in O'Toole an initial value for the random generator iteratively transmitted from the interrogator in view of the Cato disclosing iteratively transmitting an initial value (hash base number) from an interrogator for arbitration. It further would have been obvious to have determined response by comparison of the random number and another value in view of the Snodgrass disclosing processing the arbitration number with the branch/mask to determine if response is to be made.

8. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caswell (US005231273A) in combination with

Art Unit: 2635

Gehman (US 3750167). Caswell discloses an interrogator with transceiver 705 connected to a plurality of antennas by an antenna switch 701 to avoid null. Different polarizations are disclosed, but orthogonal is not expressly recited. See col. 14 lines 40-67. Gehman discloses an analogous art interrogator with three orthogonal antennas (32,34,36) illuminating the interrogation region in three mutually orthogonal polarization planes to fully illuminate transponders. See col. 3 line 42 - col. 4 line 10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Caswell the three orthogonal polarized antennas of Gehman for full illumination of transponders since Caswell suggest different polarizations for multiple antennas.

9. Claims 12-13 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Toole (US 6130602A) as applied above in view Caswell (US005231273A) in combination with Caswell (US005231273A) and Gehman (US 3750167). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in O'Toole the antenna and switch arrangement of Caswell and Gehman applied above to claims 18-19 in order to provide full illumination of transponders and avoid nulls.

10. Claim 34 is rejected under 35 U.S.C. 103(a) as being

Art Unit: 2635

unpatentable over O'Toole (US 6130602A), Cato (US 5539394A) and Snodgrass (US 5841770A) as applied above in view of Fogg (US 4479194). Fogg discloses an election ballot in fig. 7A with bar code bits 274A for identification in col. 11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included RFID transponders attached to the transponders in the combination applied above because Fogg teaches barcode ID's and the RFID transponder of O'Toole are substitutes for such barcodes, making ballots with RFID transponders an obvious substitution for advantages such as not requiring alignment of the reader.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schloss (US 5307349A) discloses a TDMA protocol for interrogation.

CONTACT INFORMATION

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications.

Art Unit: 2635


Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068.

EH
3/21/05


EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635